



OCTOBER 2012 LOCAL CLIMATOLOGICAL DATA NOAA, National Climatic Data Center

RICHMOND, VA
RICHMOND INTERNATIONAL AIRPORT (KRIC)
 Lat:37° 30'N Long: 77° 19'W Elev (Ground) 164 Feet
 Time Zone : EASTERN WBAN: 13740 ISSN#: 0198-537X



Date 1	Temperature °F						Deg Days BASE 65°		WEATHER 10	SNOW/ICE ON GND(IN)		PRECIPITATION ON GND(IN)		PRESSURE (INCHES OF HG)		WIND SPEED = MPH DIR = TENS OF DEGREES								Date 24
	MAXIMUM 2	MINIMUM 3	AVERAGE 4	DEP FROM NORMAL 5	AVERAGE DEW PT 6	AVERAGE WET BULB 7	HEATING 8	COOLING 9		0700 LST	1300 LST	2400 LST	2400 LST	AVERAGE STATION 15	AVERAGE SEA LEVEL 16	RESULTANT SPEED 17	RES DIR 18	AVERAGE SPEED 19	MAXIMUM					
																			3-SEC		2-MIN			
2	3	4	5	6	7	8	9	11	12	13	14	15	16	17	18	19	20	21	22	23				
01	70	55	63	-1	57	59	2	0	RA BR	0		0.0	0.01	29.75	29.94	1.7	09	2.5	12	14	9	13	01	
02	85	65	75	12	72	72	0	10	RA FG+ FG BR	0		0.0	0.20	29.71	29.91	5.6	15	6.4	22	17	17	17	02	
03	85*	74	80*	17	73	74	0	15	BR	0		0.0	0.00	29.87	30.08	5.0	19	5.3	14	17	12	20	03	
04	82	65	74	12	65	68	0	9	RA BR	0		0.0	T	29.95	30.14	3.6	26	4.9	17	24	13	25	04	
05	82	61	72	10	59	63	0	7		0		0.0	0.00	29.91	30.09	1.5	21	2.7	15	20	12	22	05	
06	84	56	70	8	56	61	0	5		0		0.0	0.00	29.75	29.94	2.3	28	7.9	25	01	18	01	06	
07	58	47	53	-8	48	50	12	0	RA BR	0		0.0	0.67	29.89	30.10	5.7	02	6.4	21	33	17	34	07	
08	51	45	48	-13	45	47	17	0	RA	0		0.0	0.08	30.03	30.23	7.5	01	7.9	20	09	14	01	08	
09	59	48	54	-7	51	52	11	0	RA DZ BR	0		0.0	0.09	29.94	30.13	7.6	35	7.8	20	35	15	34	09	
10	71	54	63	2	50	56	2	0	BR	0		0.0	0.00	29.82	30.01	5.3	26	6.6	23	26	16	28	10	
11	65	44	55	-5	39	46	10	0		0		0.0	0.00	30.03	30.24	3.0	36	5.2	23	36	17	36	11	
12	72	44	58	-2	41	49	7	0		0		0.0	0.00	30.04	30.25	4.3	01	5.4	28	01	21	02	12	
13	63	39	51	-8	37	44	14	0		0		0.0	0.00	30.24	30.44	2.4	08	5.0	16	05	12	09	13	
14	75	45	60	1	52	56	5	0		0		0.0	0.00	30.01	30.18	8.0	20	8.3	26	19	21	21	14	
15	69	55	62	4	60	61	3	0	RA BR	0		0.0	0.15	29.65	29.83	6.7	21	9.0	25	23	18	35	15	
16	68	47	58	0	45	51	7	0		0		0.0	0.00	29.70	29.91	3.4	33	4.0	17	34	15	32	16	
17	71	44	58	0	48	52	7	0		0		0.0	0.00	29.78	29.98	3.8	18	4.5	17	23	15	19	17	
18	75	45	60	2	55	58	5	0	RA BR	0		0.0	T	29.72	29.90	6.5	15	6.9	21	17	16	15	18	
19	79	53	66	8	57	61	0	1	RA BR	0		0.0	0.05	29.54	29.73	7.4	18	8.4	23	23	18	19	19	
20	72	45	59	2	42	50	6	0		0		0.0	0.00	29.60	29.82	3.8	29	5.3	18	27	14	26	20	
21	68	44	56	0	40	48	9	0		0		0.0	0.00	29.88	30.09	2.0	31	3.0	22	27	12	25	21	
22	73	41	57	1	42	49	8	0		0		0.0	0.00	29.99	30.18	1.0	25	1.2	13	27	9	26	22	
23	82	47	65	9	49	56	0	0		0		0.0	0.00	29.94	30.13	3.2	21	3.9	17	22	15	21	23	
24	84	52	68	13	54	59	0	3		0		0.0	0.00	29.93	30.12	2.5	19	3.3	10	16	8	17	24	
25	80	55	68	13	58	62	0	3	DZ BR	0		0.0	T	29.97	30.16	3.6	11	4.1	13	09	12	11	25	
26	71	63	67	12	62	63	0	2	RA DZ BR HZ	0		0.0	0.09	29.93	30.10	6.2	02	6.7	28	12	12	36	26	
27	67	60	64	10	56	59	1	0		0		0.0	0.00	29.70	29.87	10.8	03	11.0	25	03	18	01	27	
28	61	53	57	3	49	53	8	0	RA DZ BR	0		0.0	0.21	29.47	29.64	16.6	36	17.3	35	02	25	02	28	
29	53	43	48	-6	46	47	17	0	RA DZ BR	0		0.0	1.96	29.10	29.23	16.9	29	20.8	40*	23	31*	27	29	
30	47	38	43*	-11	38	40	22	0	RA BR	0		0.0	0.49	29.08	29.33	13.0	22	13.0	35	24	28	23	30	
31	56	37*	47	-7	35	42	18	0		0		0.0	0.00	29.41	29.63	7.9	25	8.6	25	25	16	25	31	

70.3	50.5	60.4	☼	51.0	55.1	6.2	1.8	< MONTHLY AVERAGES TOTALS >				0.0	4.00	29.78	29.98	1.2	28	6.9	< MONTHLY AVERAGES			
-0.7	2.2	0.7		<-----DEPARTURE FROM NORMAL ----->								1.02	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3									

DEGREE DAYS				GREATEST 24-HR PRECIPITATION : 2.10 DATE : 29-30				SEA LEVEL PRESSURE					
MONTHLY		SEASON TO DATE		GREATEST 24-HR SNOWFALL : 0.0 DATE :				MAXIMUM : 30.53		DATE 13		TIME 1027	
TOTAL DEPARTURE		TOTAL DEPARTURE		GREATEST SNOW DEPTH : 0 DATE :				MINIMUM : 29.00		DATE 29		TIME 2318	
HEATING :	191	-13	202	-31	NUMBER OF ->		MAXIMUM TEMP >= 90 : 0		MINIMUM TEMP <= 32 : 0		PRECIPITATION >= 0.01 INCH : 11		
COOLING :	55	16	1744	201	DAYS WITH		MAXIMUM TEMP <= 32 : 0		MINIMUM TEMP <= 0 : 0		PRECIPITATION >= 0.10 INCH : 6		
						THUNDERSTORMS : 0		HEAVY FOG : 1		SNOWFALL >= 1.0 INCH : 0			

**OCTOBER 2012
RICHMOND, VA**

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

RICHMOND, VA (KRIC)
OCTOBER 2012

WBAN # 13740

Date	FOR HOUR (LST) ENDING AT												Date	FOR HOUR (LST) ENDING AT												Date	Sum of Hourly Data	2400 LST Water Equiv.
	1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17	18	19	20	21	22	23	24			
01						T	T	T				T	01				0.01	T	T					01	0.01	0.01		
02	T	T	T	0.04	0.04				0.01	T			02				0.07	T	0.04					02	0.20	0.20		
03													03											03	0.00	0.00		
04						T	T						04											04	T	T		
05													05											05	0.00	0.00		
06													06											06	0.00	0.00		
07		T	0.13	0.10	0.04	T	0.02	0.03	0.13	0.19	0.03		07					T	T				07	0.67	0.67			
08								0.02	T	T	T		08	0.04	0.02							T	T	08	0.08	0.08		
09	T	T	0.01	0.01	T		0.04	0.03	T	T			09					T					09	0.09	0.09			
10													10											10	0.00	0.00		
11													11											11	0.00	0.00		
12													12											12	0.00	0.00		
13													13											13	0.00	0.00		
14													14											14	0.00	0.00		
15									T	0.01		0.01	15	0.03	0.01	0.04	0.05						15	0.15	0.15			
16													16											16	0.00	0.00		
17													17											17	0.00	0.00		
18													18					T					18	T	T			
19						0.01	0.03	0.01	T				19										19	0.05	0.05			
20													20										20	0.00	0.00			
21													21										21	0.00	0.00			
22													22										22	0.00	0.00			
23													23										23	0.00	0.00			
24													24										24	0.00	0.00			
25													25									T	25	T	T			
26	T	T	T	T	T	T	T	0.01	T				26					0.05	0.03	T		T	26	0.09	0.09			
27													27										27	0.00	0.00			
28													28			T	T	T	0.01	0.01	0.04	0.06	0.05	0.04	T	28	0.21	0.21
29	0.02	0.01	0.01	0.02	T	0.03	0.05	0.09	0.06	0.04	0.22	0.23	29	0.24	0.28	0.18	0.10	0.06	0.04	0.09	0.06	0.04	0.04	0.03	0.02	29	1.96	1.96
30	0.02	0.01	0.04	0.04	0.04	0.05	0.08	0.07	0.06	0.03	0.03	0.01	30	0.01			T						30	0.49	0.49			
31													31										31	0.00	0.00			

* Indicates sum of Hourly and Daily disagree.

MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)	0.07	0.11	0.14	0.17	0.22	0.28	0.31	0.38	0.45	0.52	0.66	0.79
Ending Date	07	07	07	07	07	07	29	29	29	29	29	29
Ending Time (Hr/Min)	0902	0908	0911	0915	0911	0921	1349	1408	1343	1402	1343	1330

Note : The hourly and daily precipitation totals are printed in the last 2 columns and hi-lighted in red when they disagree. NWS does not edit ASOS hourly values but may edit daily and monthly totals. Hourly, daily, and monthly totals are printed as reported by the ASOS site.

Date and time are not entered for TRACE amounts.

REFERENCE NOTES & SUPPLEMENTAL SUMMARIES

* = Extreme for the month (last occurrence if more than one).

T = Trace precipitation amount.

+ = also occurs on earlier date.

FG+ = Heavy fog, visibility .25 miles or less.

BLANK entries denote missing or unreported data.

Resultant wind is the vector sum of the wind speeds and directions divided by the number of observations.

Wind direction is recorded in tens of degrees (2 digits) clockwise from true north. '00' = calm, 'VR' = variable.

Precipitation is for the 24-hour period ending at the time indicated in the column heading.

Water Equivalent of snow on the ground is reported only when the depth is 2 or more inches.

NORMALS ARE FOR THE YEARS 1981-2010

WEATHER NOTATIONS

QUALIFIER	WEATHER PHENOMENA		
DESCRIPTOR	PRECIPITATION	OBSCURATION	OTHER
BC Patches	DZ Drizzle	BR Mist	DS Duststorm
BL Blowing	GR Hail	DU Widespread Dust	FC Funnel Cloud
DR Low Drifting	GS Small Hail and/or Snow Pellets	FG Fog	+FC Tornado Waterspout
FZ Freezing	IC Ice Crystals	FU Smoke	PO Well-Developed Dust/Sand Whirls
MI Shallow	PL Ice Pellets	HZ Haze	
PR Partial	RA Rain	PY Spray	SQ Squalls
SH Shower(s)	SG Snow Grains	SA Sand	SS Sandstorm
TS Thunderstorm	SN Snow	VA Volcanic Ash	GL Glaze
VC In the Vicinity	UP Unkown Precipitation		

Intensity (as indicated on pages 4 to 6):
'+' = Heavy '' = Moderate '-' = Light

RICHMOND, VA OCTOBER 2012

Ceilometer (30-second) data are used to derive cloudiness at or below 12,000 feet. This cloudiness is the mean cloud cover detected during sunrise to sunset (SR-SS), or midnight to midnight (MN-MN).

Satellite data are used to derive cloudiness above 12,000 feet. Effective Cloud Amount is based on the cloud cover and the transparency of the clouds within the satellite field of view (approx. 31x31 miles).

Sky Condition is based on the sum (not to exceed 8) of the sunrise to sunset cloud cover below and above 12,000 feet. Both ceilometer and satellite data must be present to compute Sky Condition. Clear = 0-2 oktas, Partly Cloudy = 3-6 oktas, Cloudy = 7-8 oktas.

A Heating (Cooling) Degree Day is the difference between the average daily temperature and 65 degrees F. The HDD season begins July 1, the CDD season begins January 1.

Dew Point is the temperature to which the air must be cooled to achieve 100% relative humidity. Wet Bulb is the temperature the air would have if cooled to saturation at constant pressure by evaporation of water into it.

Snow Depth, Snowfall, and Sunshine data may come from nearby sites that the National Weather Service deems Climatologically representative of this site.

ADDITIONAL NOTES:

Station Augmentation-SANDSTON COOP
Lat/Lon:37.54417/-77.27583 Elevation:165
Distance:4 MI Dir:E
Augmented Elements:Temp, Precip, Snow
Equipment:MMS, SRG, Snowboard

Date	SUNSHINE		CLOUDINESS (OKTAS)				VISIBILITY (MILES)		RESERVED
	TOTAL MINUTES	PERCENT POSSIBLE	SR-SS		MN-MN		MINIMUM	MAXIMUM	
			Sky Cover	Satellite	Sky Cover	Satellite			
01							6.00	10.00	
02							0.25	10.00	
03							6.00	10.00	
04							5.00	10.00	
05							9.00	10.00	
06							7.00	10.00	
07							1.50	10.00	
08							8.00	10.00	
09							2.00	10.00	
10							4.00	10.00	
11							10.00	10.00	
12							10.00	10.00	
13							10.00	10.00	
14							10.00	10.00	
15							4.00	10.00	
16							6.00	10.00	
17							10.00	10.00	
18							3.00	10.00	
19							2.00	10.00	
20							10.00	10.00	
21							10.00	10.00	
22							10.00	10.00	
23							10.00	10.00	
24							10.00	10.00	
25							3.00	10.00	
26							1.00	10.00	
27							10.00	10.00	
28							2.00	10.00	
29							2.00	10.00	
30							4.00	10.00	
31							10.00	10.00	
MONTHLY AVGS							6.31	10.00	
SUNSHINE (Minutes)									
Total : 0					Possible : 20853				
Percent Possible : 0									
NUMBER OF DAYS WITH : SKY CONDITION									
Clear		Partly CLDY			Cloudy			Missing	
MINIMUM VISIBILITY (MILES)									
<= .25			<= 3.0			>= 7.0			
1			9			15			

OBSERVATIONS AT 3-HOURLY INTERVALS

RICHMOND, VA

OCTOBER 2012

KRIC

WBAN # 13740

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		WEATHER	TEMPERATURE °F			WIND RELATIVE HUMIDITY (PCT)	WIND SPEED (MPH) DIRECTION Tens of Deg	PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		WEATHER	WEATHER	TEMPERATURE °F			WIND RELATIVE HUMIDITY (PCT)	WIND SPEED (MPH) DIRECTION Tens of Deg	PRESSURE (INCHES, HG)										
			Observation Time (LST)	Eff Cld Amt Oktas		VISIBILITY (MILES)	DRY BULB	DEW POINT			WET BULB	STATION				SEA LEVEL	Observation Time (LST)			Eff Cld Amt Oktas	VISIBILITY (MILES)	DRY BULB			DEW POINT	WET BULB	STATION	SEA LEVEL							
																													DRY BULB	DEW POINT	WET BULB	STATION	SEA LEVEL		
SUNRISE: 0605						OCT 01						SUNSET: 1753						SUNRISE: 0610						OCT 07						SUNSET: 1744					
01	SCT	300				57	54	55	90	0	00	29.73	29.92	01	OVC	080					57	43	50	60	8	03	29.85	30.03							
04	BKN	300				56	53	54	90	0	00	29.71	29.90	04	OVC	090					51	47	49	86	8	05	29.89	30.08							
07	OVC	130			-RA	56	53	54	90	0	00	29.76	29.96	07	OVC	042					51	48	49	90	6	04	29.89	30.09							
10	OVC	110				63	54	58	73	5	08	29.79	29.98	10	OVC	065			RA BR		51	49	50	93	8	08	29.91	30.10							
13	OVC	070				69	57	62	66	7	13	29.76	29.96	13	OVC	045					54	48	51	80	8	02	29.87	30.07							
16	OVC	055			-RA	67	61	63	81	3	VR	29.75	29.94	16	OVC	027					55	47	51	75	5	01	29.86	30.05							
19	OVC	030				64	61	62	90	3	09	29.76	29.95	19	OVC	035					51	49	50	93	6	35	29.95	30.14							
22	OVC	021				65	60	62	84	0	00	29.76	29.95	22	SCT	080					49	48	48	96	0	00	29.98	30.18							
SUNRISE: 0605						OCT 02						SUNRISE: 1751						SUNRISE: 0611						OCT 08						SUNSET: 1743					
01	OVC	025			-RA	65	62	63	90	5	09	29.73	29.91	01	FEW	003					46	45	46	96	6	35	30.00	30.19							
04	OVC	007			-RA BR	66	65	65	97	7	11	29.70	29.89	04	BKN	180					46	43	45	89	8	02	30.02	30.22							
07	OVC	003			FG	70	69	69	97	7	14	29.72	29.91	07	OVC	180					47	42	45	83	8	36	30.07	30.26							
10	OVC	004			BR	74	73	73	97	9	17	29.72	29.91	10	OVC	085					49	45	47	86	9	03	30.08	30.27							
13	BKN	036				82	75	77	79	9	19	29.69	29.88	13	OVC	065					50	46	48	86	7	36	30.06	30.25							
16	BKN	075			+RA BR	78	75	76	91	9	20	29.68	29.87	16	OVC	055					51	48	49	90	8	02	30.01	30.20							
19	BKN	230				77	76	76	97	5	14	29.72	29.91	19	OVC	044					50	47	48	90	8	36	30.01	30.20							
22	BKN	230			BR	74	74	74	100	3	18	29.77	29.96	22	OVC	038					50	46	48	86	8	34	30.00	30.19							
SUNRISE: 0606						OCT 03						SUNRISE: 1750						SUNRISE: 0612						OCT 09						SUNSET: 1741					
01	BKN	200			BR	75	74	74	97	6	19	29.79	29.97	01	OVC	025					50	46	48	86	13	35	29.97	30.16							
04	BKN	015				75	73	74	94	6	21	29.83	30.01	04	OVC	005			-DZ BR		48	47	48	96	13	35	29.96	30.15							
07	BKN	170			BR	75	73	74	94	0	00	29.88	30.06	07	OVC	010			-RA BR		48	47	48	96	10	36	29.97	30.16							
10	OVC	170				79	73	75	82	6	20	29.92	30.11	10	OVC	005			BR		51	50	50	96	10	36	29.98	30.18							
13	OVC	300				84	71	75	65	8	18	29.91	30.09	13	OVC	007					56	52	54	87	7	35	29.93	30.13							
16	BKN	150				83	72	75	70	3	16	29.88	30.07	16	OVC	013					58	53	55	84	5	03	29.91	30.10							
19	OVC	200				77	73	74	88	5	18	29.92	30.11	19	OVC	015					57	54	55	90	3	01	29.90	30.09							
22	OVC	200				75	73	74	94	5	18	29.95	30.14	22	OVC	013					57	54	55	90	0	00	29.90	30.09							
SUNRISE: 0607						OCT 04						SUNRISE: 1748						SUNRISE: 0613						OCT 10						SUNSET: 1740					
01	OVC	150			BR	75	74	74	97	5	21	29.95	30.13	01	OVC	016					58	54	56	87	0	00	29.86	30.06							
04	BKN	110				75	66	69	74	7	27	29.95	30.14	04	OVC	045					57	54	55	90	0	00	29.83	30.03							
07	OVC	150				70	66	67	87	5	19	29.98	30.16	07	SCT	040			BR		54	53	53	96	5	21	29.84	30.04							
10	OVC	150				73	65	68	76	9	21	29.99	30.18	10	SCT	031					65	49	56	56	13	24	29.83	30.02							
13	BKN	200				76	64	68	67	9	26	29.95	30.14	13	FEW	040					69	47	57	46	10	29	29.77	29.96							
16	BKN	300				81	63	69	54	7	32	29.93	30.11	16	SCT	055					70	47	57	44	10	23	29.74	29.93							
19	BKN	300				73	64	67	74	0	00	29.94	30.13	19	SCT	085					64	49	56	58	7	25	29.78	29.98							
22	BKN	300				66	64	65	93	0	00	29.96	30.15	22	FEW	070					62	47	54	58	10	30	29.87	30.06							
SUNRISE: 0608						OCT 05						SUNRISE: 1747						SUNRISE: 0613						OCT 11						SUNSET: 1738					
01	BKN	250				66	64	65	93	0	00	29.96	30.15	01	CLR	NC					52	45	49	77	8	36	29.95	30.14							
04	SCT	250				63	62	62	97	0	00	29.96	30.15	04	CLR	NC					49	42	46	77	6	34	30.00	30.19							
07	FEW	250				63	59	61	87	0	00	29.97	30.16	07	CLR	NC					46	39	43	77	7	36	30.08	30.28							
10	FEW	250				78	58	66	50	0	00	29.97	30.16	10	CLR	NC					57	33	46	40	11	02	30.14	30.33							
13	SCT	250				81	54	65	39	8	19	29.89	30.08	13	CLR	NC					61	31	47	32	6	23	30.08	30.27							
16	SCT	300				80	55	65	42	9	20	29.85	30.03	16	CLR	NC					63	34	49	34	6	18	30.04	30.24							
19	FEW	300				69	60	64	73	0	00	29.84	30.03	19	FEW	300					51	44	48	77	5	14	30.04	30.24							
22	CLR	NC				62	58	60	87	0	00	29.83	30.02	22	CLR	NC					49	43	46	80	0	00	30.04	30.23							
SUNRISE: 0609						OCT 06						SUNRISE: 1745						SUNRISE: 0614						OCT 12						SUNSET: 1737					
01	CLR	NC				62	59	60	90	3	16	29.80	29.98	01	CLR	NC					48	44	46	86	0	00	30.01	30.21							
04	CLR	NC				60	58	59	93	5	20	29.76	29.95	04	CLR	NC					46	44	45	93	3	17	29.97	30.16							
07	SCT	250				61	58	59	90	5	20	29.75	29.93	07	FEW	150					46	44	45	93	0	00	30.00	30.19							
10	SCT	250				76	62	67	62	10	22	29.72	29.91	10	FEW	250					63	44	53	50	0	00	30.03	30.22							
13	SCT	250				84	60	69	44	10	27	29.68	29.86	13	CLR	NC					70	41	55	35	7	35	30.01	30.20							
16	BKN	090				80	58	66	47	13	27	29.68	29.87	16	SCT	300					70	39	54	32	9	01	30.03	30.22							
19	SCT	300				66	53	59	63	8	02	29.78	29.97	19	CLR	NC					56	41	49	57	10	02	30.15	30.34							
22	SCT	075				58	44	51	60	8	01	29.85	30.03	22	CLR	NC					49	36	43	61	7	01	30.22	30.42							

OBSERVATIONS AT 3-HOURLY INTERVALS

RICHMOND, VA

OCTOBER 2012

KRIC

WBAN # 13740

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		
			Observation Time (LST)	Eff Cld Amt Oktas			DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION Tens of Deg	STATION	SEA LEVEL				Observation Time (LST)	Eff Cld Amt Oktas			DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION Tens of Deg	STATION	SEA LEVEL	
																														Observation Time (LST)
SUNRISE: 0615 OCT 13 SUNSET: 1735																														
01	CLR	NC			10.00		45	37	41	74	5	01	30.25	30.44	01	BKN	009			10.00		BR	63	60	61	90	5	12	29.59	29.78
04	CLR	NC			10.00		42	36	39	79	5	03	30.25	30.44	04	OVC	005			6.00		BR	65	64	64	97	3	20	29.56	29.74
07	CLR	NC			10.00		42	36	39	79	6	04	30.31	30.50	07	OVC	110			2.00		-RA BR	65	64	64	97	8	14	29.58	29.77
10	FEW	250			10.00		55	34	45	45	6	08	30.33	30.53	10	OVC	015			5.00		BR	68	64	66	87	7	16	29.57	29.76
13	SCT	250			10.00		61	32	48	34	6	10	30.25	30.44	13	SCT	026			10.00			77	63	68	62	13	16	29.52	29.70
16	BKN	300			10.00		62	35	49	37	7	19	30.20	30.40	16	SCT	300			10.00			78	52	63	40	16	20	29.47	29.65
19	BKN	300			10.00		50	41	46	71	3	12	30.19	30.38	19	FEW	075			10.00			68	51	58	55	9	22	29.49	29.68
22	SCT	300			10.00		48	43	46	83	3	14	30.19	30.38	22	CLR	NC			10.00			63	41	52	45	9	22	29.55	29.74
SUNRISE: 0616 OCT 14 SUNSET: 1734																														
01	SCT	300			10.00		47	45	46	93	6	18	30.13	30.32	01	CLR	NC			10.00			53	42	48	66	3	16	29.54	29.72
04	FEW	300			10.00		46	44	45	93	0	00	30.09	30.28	04	CLR	NC			10.00			48	42	45	80	0	00	29.55	29.75
07	FEW	300			10.00		47	45	46	93	3	18	30.09	30.28	07	SCT	300			10.00			45	42	44	89	0	00	29.60	29.79
10	FEW	300			10.00		66	51	58	59	10	23	30.09	30.28	10	FEW	250			10.00			63	44	53	50	0	00	29.63	29.82
13	SCT	300			10.00		74	52	61	46	16	21	29.99	30.18	13	FEW	040			10.00			70	42	55	36	9	26	29.59	29.79
16	BKN	300			10.00		73	56	63	55	14	20	29.90	30.10	16	BKN	065			10.00			70	42	55	36	10	24	29.61	29.80
19	OVC	300			10.00		63	56	59	78	6	18	29.87	30.07	19	BKN	300			10.00			62	41	51	46	6	29	29.68	29.88
22	BKN	300			10.00		64	57	60	78	7	19	29.83	30.02	22	BKN	210			10.00			57	39	48	51	7	33	29.75	29.94
SUNRISE: 0617 OCT 15 SUNSET: 1733																														
01	OVC	049			10.00		65	58	61	78	11	19	29.79	29.98	01	OVC	240			10.00			52	40	46	64	3	33	29.78	29.97
04	OVC	250			10.00		64	58	60	81	8	20	29.72	29.91	04	SCT	240			10.00			46	41	44	83	0	00	29.82	30.01
07	OVC	250			10.00		64	58	60	81	9	19	29.68	29.87	07	CLR	NC			10.00			44	40	42	86	0	00	29.90	30.10
10	BKN	080			10.00		69	62	65	79	15	22	29.66	29.85	10	CLR	NC			10.00			62	39	51	43	10	35	29.95	30.14
13	OVC	110			10.00		65	63	64	93	10	20	29.60	29.79	13	FEW	060			10.00			66	37	52	34	6	VR	29.91	30.10
16	BKN	065			10.00		65	64	64	97	5	20	29.52	29.71	16	FEW	065			10.00			66	38	52	36	7	34	29.89	30.08
19	SCT	120			10.00		64	63	63	97	6	21	29.52	29.71	19	CLR	NC			10.00			55	41	48	59	0	00	29.93	30.12
22	SCT	055			10.00		57	54	55	90	7	33	29.63	29.82	22	CLR	NC			10.00			48	43	46	83	0	00	29.96	30.15
SUNRISE: 0618 OCT 16 SUNSET: 1731																														
01	FEW	030			6.00	BR	53	51	52	93	7	34	29.66	29.85	01	CLR	NC			10.00			46	43	45	89	0	00	29.97	30.16
04	CLR	NC			10.00		50	47	48	90	3	33	29.69	29.88	04	CLR	NC			10.00			43	39	41	86	0	00	29.99	30.18
07	SCT	250			10.00		47	44	46	89	0	00	29.74	29.93	07	CLR	NC			10.00			42	39	41	89	0	00	30.03	30.22
10	FEW	040			10.00		61	43	52	52	9	01	29.76	29.95	10	CLR	NC			10.00			64	41	52	43	0	00	30.04	30.24
13	SCT	050			10.00		65	43	54	45	6	25	29.71	29.90	13	CLR	NC			10.00			69	38	53	32	0	00	29.99	30.19
16	FEW	050			10.00		67	42	54	40	6	34	29.68	29.88	16	CLR	NC			10.00			72	38	55	29	3	32	29.96	30.15
19	FEW	250			10.00		54	47	50	77	0	00	29.72	29.91	19	CLR	NC			10.00			58	45	51	62	0	00	29.98	30.17
22	CLR	NC			10.00		50	45	48	83	0	00	29.74	29.93	22	CLR	NC			10.00			52	45	49	77	0	00	29.99	30.18
SUNRISE: 0619 OCT 17 SUNSET: 1730																														
01	CLR	NC			10.00		48	45	47	89	0	00	29.76	29.96	01	FEW	250			10.00			51	44	48	77	3	22	29.97	30.16
04	SCT	250			10.00		45	43	44	93	0	00	29.79	29.98	04	CLR	NC			10.00			51	44	48	77	0	00	29.95	30.14
07	BKN	250			10.00		47	45	46	93	0	00	29.81	30.00	07	BKN	250			10.00			50	44	47	80	3	18	29.97	30.16
10	OVC	250			10.00		61	49	55	65	0	00	29.83	30.03	10	SCT	250			10.00			71	51	60	49	8	24	29.97	30.16
13	OVC	250			10.00		68	48	57	49	7	22	29.78	29.97	13	BKN	250			10.00			81	47	62	30	10	25	29.91	30.10
16	SCT	300			10.00		69	48	57	47	7	18	29.75	29.94	16	BKN	250			10.00			77	51	62	40	7	18	29.88	30.08
19	CLR	NC			10.00		57	51	54	80	3	14	29.78	29.97	19	BKN	250			10.00			64	52	57	65	3	16	29.91	30.10
22	CLR	NC			10.00		55	50	52	83	8	17	29.79	29.98	22	FEW	250			10.00			63	54	58	73	0	00	29.93	30.12
SUNRISE: 0620 OCT 18 SUNSET: 1729																														
01	CLR	NC			10.00		52	48	50	86	6	16	29.77	29.96	01	CLR	NC			10.00			58	53	55	84	3	17	29.93	30.12
04	CLR	NC			6.00	BR	49	48	48	96	0	00	29.77	29.96	04	CLR	NC			10.00			55	51	53	86	3	20	29.92	30.11
07	SCT	250			5.00	BR	47	46	47	96	0	00	29.77	29.96	07	BKN	250			10.00			54	51	52	90	7	20	29.95	30.14
10	BKN	250			10.00		65	53	58	65	8	16	29.78	29.97	10	OVC	250			10.00			69	54	60	59	3	VR	29.96	30.15
13	BKN	250			10.00		73	56	63	55	11	14	29.69	29.88	13	FEW	200			10.00			81	55	65	41	0	00	29.91	30.10
16	BKN	120			10.00		72	60	65	66	11	13	29.65	29.84	16	FEW	200			10.00			81	55	65	41	6	18	29.89	30.08
19	OVC	160			10.00		67	62	64	84	10	13	29.65	29.84	19	SCT	160			10.00			70	57	62	64	0	00	29.92	30.11
22	BKN	220			10.00		66	61	63	84	9	16	29.62	29.81	22	SCT	160			10.00			63	57	60	81	0	00	29.94	30.13

OBSERVATIONS AT 3-HOURLY INTERVALS

RICHMOND, VA

OCTOBER 2012

KRIC

WBAN # 13740

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		WEATHER	TEMPERATURE °F			WIND		PRESSURE (INCHES, HG)			
			Observation Time (LST)	Eff Cld Amt Oktas		VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION Tens of Deg	STATION	SEA LEVEL
SUNRISE: 0627 OCT 25 SUNSET: 1720														
01	CLR	NC				61	56	58	84	0	00	29.95	30.14	
04	FEW	150				56	54	55	93	0	00	29.94	30.13	
07	CLR	NC			BR	57	55	56	93	0	00	29.98	30.17	
10	CLR	NC				70	60	64	71	0	00	30.01	30.19	
13	CLR	NC				78	59	66	52	5	11	29.97	30.15	
16	FEW	048				77	57	65	50	9	11	29.95	30.14	
19	FEW	300				66	61	63	84	7	09	29.98	30.17	
22	OVC	009			BR	63	61	62	93	3	12	29.99	30.18	
SUNRISE: 0628 OCT 26 SUNSET: 1718														
01	OVC	005			-DZ BR	64	62	63	93	5	11	29.96	30.14	
04	OVC	014			-DZ BR	64	62	63	93	6	03	29.94	30.13	
07	OVC	003			-DZ BR	64	63	63	97	8	36	29.96	30.15	
10	OVC	005			BR	66	64	65	93	9	03	29.98	30.17	
13	OVC	250				70	61	65	73	7	04	29.90	30.09	
16	OVC	041				69	61	64	76	8	36	29.86	30.05	
19	BKN	026			-RA BR	64	63	63	97	8	01	29.87	30.06	
22	OVC	060			-RA	64	62	63	93	7	03	29.84	30.03	
SUNRISE: 0629 OCT 27 SUNSET: 1717														
01	OVC	250				62	59	60	90	7	03	29.79	29.98	
04	OVC	210				61	59	60	93	9	04	29.73	29.92	
07	OVC	210				61	58	59	90	9	02	29.73	29.92	
10	OVC	015				63	58	60	84	13	02	29.72	29.91	
13	BKN	100				67	57	61	70	13	03	29.68	29.87	
16	OVC	100				66	56	60	70	10	03	29.64	29.83	
19	OVC	050				63	54	58	73	15	02	29.62	29.82	
22	OVC	140				61	53	57	75	11	02	29.61	29.80	
SUNRISE: 0630 OCT 28 SUNSET: 1716														
01	OVC	095				60	51	55	72	16	36	29.56	29.76	
04	OVC	100				59	46	52	62	18	03	29.53	29.72	
07	OVC	090				59	50	54	72	14	01	29.52	29.70	
10	OVC	120				58	46	52	65	21	01	29.49	29.69	
13	OVC	070				59	47	53	65	22	01	29.41	29.60	
16	OVC	030			-DZ	57	50	53	78	21	36	29.39	29.58	
19	OVC	030			-DZ BR	54	52	53	93	16	34	29.39	29.58	
22	OVC	020			-RA BR	53	51	52	93	18	34	29.36	29.54	
SUNRISE: 0631 OCT 29 SUNSET: 1715														
01	OVC	006			-DZ BR	53	52	52	96	15	34	29.31	29.50	
04	OVC	012			-RA	53	51	52	93	20	34	29.26	29.44	
07	OVC	025			-RA BR	52	49	50	90	18	34	29.23	29.41	
10	OVC	015			-RA	51	48	49	90	22	32	29.17	29.35	
13	OVC	034			RA BR	49	46	47	89	23	30	29.04	29.23	
16	OVC	023			-RA BR	46	43	45	89	25	27	28.91	29.09	
19	OVC	024			-RA BR	45	41	43	86	18	26	28.83	29.02	
22	OVC	038			-RA	43	40	42	89	24	24	28.82	29.00	
SUNRISE: 0632 OCT 30 SUNSET: 1714														
01	OVC	050			-RA	43	39	41	86	23	23	28.85	29.03	
04	OVC	033			-RA	42	39	41	89	16	23	28.92	29.10	
07	OVC	028			-RA BR	40	37	39	89	17	22	29.04	29.22	
10	OVC	012			-RA BR	40	38	39	93	15	21	29.14	29.33	
13	OVC	024				43	39	41	86	15	21	29.18	29.37	
16	OVC	070				46	40	43	80	10	20	29.23	29.41	
19	OVC	060				44	39	42	83	8	20	29.29	29.48	
22	OVC	055				43	35	40	73	8	21	29.34	29.52	

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		WEATHER	TEMPERATURE °F			WIND		PRESSURE (INCHES, HG)			
			Observation Time (LST)	Eff Cld Amt Oktas		VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION Tens of Deg	STATION	SEA LEVEL
SUNRISE: 0633 OCT 31 SUNSET: 1713														
01	BKN	048				43	34	39	71	10	23	29.34	29.53	
04	BKN	210				40	34	37	79	6	22	29.37	29.56	
07	BKN	300				41	35	38	79	5	23	29.42	29.62	
10	SCT	250				51	35	44	54	15	28	29.44	29.62	
13	BKN	250				55	35	46	47	14	28	29.42	29.61	
16	OVC	200				54	35	45	49	10	22	29.44	29.63	
19	OVC	250				51	35	44	54	10	26	29.48	29.67	
22	BKN	250				47	35	42	63	8	28	29.52	29.70	

3-HOURLY OBSERVATION NOTES

Sky Cover is the amount of the sky obscured. CLR or SKC = 0, FEW = 1/8-2/8, SCT = 3/8-4/8, BKN = 5/8-7/8, OVC = 8/8, W = Vertical Visibility = 8/8

Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet. NC = No Ceiling detected.

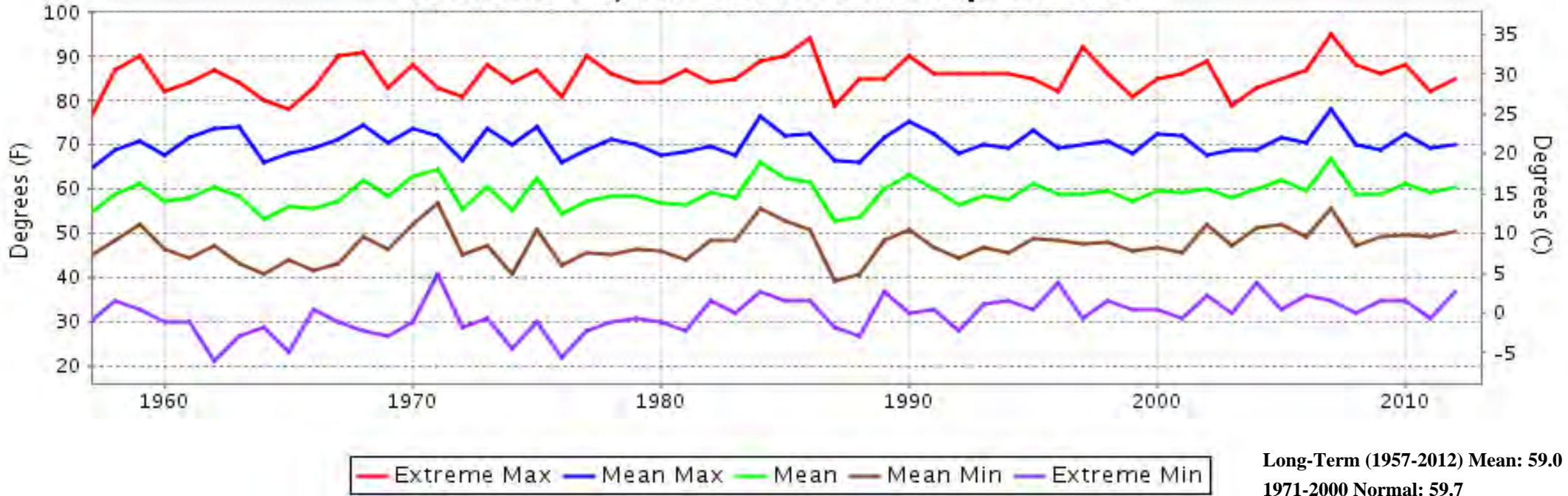
& = Original observation contained additional weather elements.

See page 3 for additional notes.

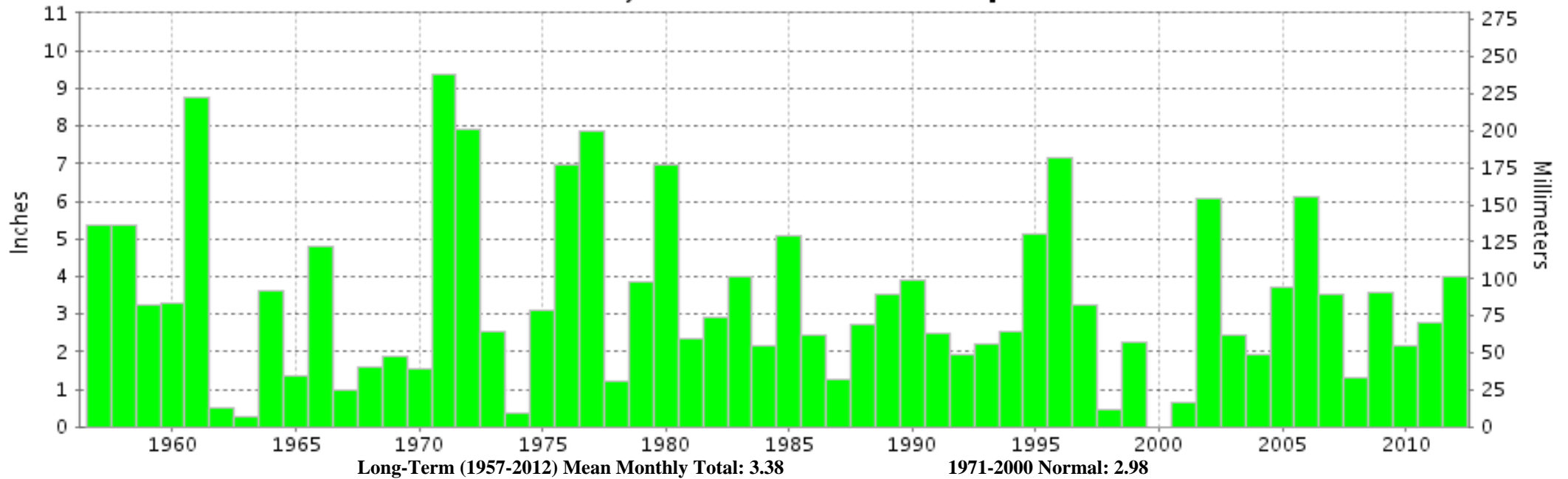
SUMMARY BY HOUR

HOUR (LST)	AVERAGES								RESULTANT WIND (MPH)			
	CEILOMETER	EFF CLD AMT	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY	PRESSURE (Inches, HG)		VISIBILITY (Miles)	WIND SPEED (MPH)	SPEED	DIRECTION
							STATION	SEA LEVEL				
01			56	51	53	85	29.79	29.98	9.06	6	1	27
02			55	51	53	85	29.79	29.98	9.19	6	1	27
03			55	51	53	87	29.78	29.97	8.90	6	1	27
04			54	50	52	88	29.79	29.98	8.74	5	0	28
05			54	50	52	88	29.80	29.99	8.68	5	1	27
06			53	50	51	88	29.80	29.99	8.37	6	1	27
07			53	50	52	89	29.81	30.00	7.88	5	0	28
08			57	52	54	84	29.83	30.02	8.04	6	0	28
09			60	52	56	75	29.83	30.02	8.38	8	1	27
10			63	51	57	68	29.83	30.02	8.69	8	2	27
11			65	51	57	63	29.82	30.01	9.10	8	2	27
12			67	51	58	60	29.80	29.99	9.45	9	3	27
13			68	51	58	57	29.78	29.97	9.65	9	3	27
14			69	50	58	56	29.76	29.95	9.71	9	3	27
15			69	50	59	56	29.75	29.94	9.56	9	3	27
16			68	51	58	58	29.75	29.94	9.45	9	2	27
17			66	52	58	63	29.75	29.94	9.65	8	1	27
18			62	53	57	72	29.76	29.95	9.06	7	1	27
19			60	52	56	76	29.77	29.96	9.37	6	1	27
20			59	52	55	77	29.78	29.97	9.37	6	1	27
21			58	51	55	79	29.79	29.98	9.55	6	2	27
22			57	51	54	80	29.79	29.98	9.35	5	2	27
23			56	51	54	81	29.79	29.98	9.68	6	1	27
24			56	51	53	83	29.78	29.98	9.45	5	1	27

RICHMOND, VA OCTOBER Temperatures



RICHMOND, VA OCTOBER Precipitation





**OCTOBER 2012
RICHMOND, VA**

**LOCAL CLIMATOLOGICAL DATA
NOAA, National Climatic Data Center**

I certify that this is an official publication of the National Oceanic and Atmospheric Administration (NOAA). It is compiled using information from weather observing sites operated by NOAA-National Weather Service / Department Of Transportation-Federal Aviation Administration and received at the National Climatic Data Center (NCDC), Asheville, North Carolina 28801.

A handwritten signature in black ink, appearing to read "Thomas R. Karl".

DIRECTOR

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